<u>SUBJECT</u> <u>DATE</u>

1056.	Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	APR 23, 2015
1057.	Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE	APR 30, 2015
1058.	Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE	MAY 7, 2015
1059.	Decharacterized Wastes, <90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE	MAY 14, 2015
1060.	Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE	MAY 21, 2015
1061.	Hazardous Debris Macroencapsulation and Size Reduction	ENCORE	MAY 28, 2015
1062.	Universal Waste Lamps and Prohibition on Crushing		JUN 4, 2015
1063.	F003 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 11, 2015
1064.	F001 - F005 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 18, 2015
1065.	Macroencapsulation of Hazardous Debris and Presence of Free Liquids	ENCORE	JUN 25, 2015
1066. 1067.	DOT Shipping of Damaged, Defective or Recalled Lithium Batteries	ENCORE	JUL 1, 2015
1067.	Used Oil Eligibility for Animal and Vegetable Oils Used Oil Eligibility for Petroleum Oils Mixed with Animal or Vegetable Oils	ENCORE	JUL 9, 2015 JUL 16, 2015
1069.	Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction/Destruction	ENCORE	JUL 23, 2015
1070.	Conditioned Exclusion for Characteristic Debris Treated via Immobilization	LINOOTIL	JUL 30, 2015
1071.	RCRA Personnel Training and Classroom Training vs. Online Training		AUG 6, 2015
1072.	PCB Decontamination Standards with No Decontamination Performed		AUG 13, 2015
1073.	PCB Manifest Exceptions a.k.a. When is a PCB Manifest Not Required	ENCORE	AUG 19, 2015
1074.	PCB Manifest Relief a.k.a. When is a PCB Manifest Not Required – The Sequel		AUG 27, 2015
1075.	Hazardous Debris and Radioactively Contaminated Cadmium Batteries	ENCORE	SEP 3, 2015
1076.	Hazardous Debris and Radioactively Contaminated Lead Acid Batteries	ENCORE	SEP 10, 2015
1077.	Mercury Wet Cell Batteries - Debris or Not Debris	ENCORE	SEP 17, 2015
1078.	Hazardous Debris and Non-Radioactive Lead Acid Batteries	ENCORE	SEP 24, 2015
1079.	Unused Paraformaldehyde - U Listed Hazardous Waste or Not?	ENCORE	OCT 1, 2015
1080.	CAS Numbers and the Hazardous Waste "U" and "P" Listings	ENCORE	OCT 15, 2015
1081. 1082.	Universal Waste One Year Accumulation and Multiple Handlers LDR Notifications and F001-F005 Constituents of Concern	ENCORE ENCORE	OCT 15, 2015 OCT 29, 2015
1082.	LDR Notifications and F001-F005 Constituents of Concern – Again	ENCORE	NOV 5, 2015
1084.	LDR Notifications and F001-F005 Constituents of Concern - One Last Time	ENCORE	NOV 12, 2015
1085.	DOT and Terminal Protection of Alkaline Batteries	ENCORE	NOV 19, 2015
1086.	Used Oil and Keeping Containers Closed – WAC 173-303 vs. 40 CFR 279		NOV 24, 2015
1087.	PCB Weight Determinations	ENCORE	DEC 3, 2015
1088.	Satellite Accumulation Requirements and Container Inspections	ENCORE	DEC 10, 2015
1089.	'Twas The Night Before Christmas - The Twenty-Third Annual Edition	ENCORE	DEC 24, 2015
1090.	Satellite Accumulation and 85-Gallon Containers	ENCORE	DEC 31, 2015
1091.	PCB Date Removed From Service Notations – On the Item or In a Log	ENCORE	JAN 7, 2016
1092.	The Date Removed From Service Marking on the PCB Mark	ENCORE	JAN 14, 2016
1093.	Generator Weekly Inspection Log Documentation – Federal vs. WA State	ENCORE	JAN 21, 2016
1094. 1095.	Used Oil and Weekly Inspections TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date	ENCORE ENCORE	JAN 28, 2016
1095.	PCB Containers and Multiple Removed From Service Dates	ENCORE	FEB 4, 2016 FEB 11, 2016
1097.	Generator Inspection Logs and Corrective Action Documentation	ENCORE	FEB 18, 2016
1098.	PCB Concentrations and Micrograms per Centimeters Squared (µg/cm²)		FEB 25, 2016
1099.	RCRA Empty Containers and Removing as Much Waste as Possible	ENCORE	MAR 3, 2016
1100.	PCB Incineration and "Six Nines" Destruction Removal Efficiency Criteria	ENCORE	MAR 10, 2016
1101.	RCRA Treatment and The Two-Part Definition		MAR 17, 2016
1102.	D002 Waste and Dilution as Adequate LDR Treatment	ENCORE	MAR 24, 2016
1103.	Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit		MAR 31, 2016
1104.	Satellite Accumulation and Process Location Changes	ENCORE	APR 7, 2016
1105.	Satellite Accumulation Prior to and After Recycling	ENCORE	APR 14, 2016
1106.	Method Detection Limits and Hazardous Waste Determinations	ENCORE	APR 21, 2016
1107. 1108.	Method Detection Limits and Hazardous Waste Determinations II Radioactive Lead Solids vs. Non-radioactive Lead Contaminated Debris	ENCORE ENCORE	APR 28, 2016 MAY 5, 2016
1100.	PCB Bulk Product Wastes and the One Year Disposal Requirement	LINCORL	MAY 12, 2016
1110.	PCB Waste Storage Limitations and the One-Year Extension		MAY 19, 2016
1111.	PCB Waste Storage Limitations and the PCB Radioactive Waste Exemption		MAY 26, 2016
1112.	Separating Hazardous Debris and Hazardous Nondebris	ENCORE	JUN 2, 2016
1113.	Product Expiration Dates and Solid Waste Determinations (Reverse Distribution)	ENCORE	JUN 9, 2016
1114.	Satellite Accumulation Areas and Incompatible Wastes		JUN 16, 2016
1115.	Satellite Accumulation Areas and Ignitable Wastes		JUN 22, 2016
1116.	Universal Waste, Incandescent Bulbs and Nonhazardous Bulbs	ENCORE	JUN 30, 2016
1117.	The Domestic Sewage Exclusion and Sewer Sludge Removal		JUL 7, 2016
1118.	The Domestic Sewage Exclusion and Sewer Sludge Transport	ENCORE	JUL 14, 2016
1119. 1120.	RCRA Empty Acutely Hazardous Waste Containers	ENCORE ENCORE	JUL 20, 2016
1120.	RCRA Manifest Discrepancies and Physical State	LINOOUE	JUL 28, 2016

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TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

FROM: PAUL W. MARTIN, RCRA Subject Matter Expert

CHPRC Environmental Protection, Hanford, WA

SUBJECT: RCRA MANIFEST DISCREPANCIES AND PHYSICAL STATE

DATE: JULY 28, 2016

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CHPRC Projects	CH PRC - Env.	<u>MSA</u>	Hanford Laboratories	Other Hanford	Other Hanford
	Protection			Contractors	Contractors
Richard Austin		Jerry Cammann	(TBD)		
Roni Ashley	Brett Barnes	Jeff Ehlis		Bill Bachmann	Dan Saueressig
Tania Bates	Mitch Boyd	Garin Erickson	DOE RL, ORP, WIPP	Dean Baker	Merrie Schilperoort
Bob Cathel	Ron Brunke	Panfilo Gonzales Jr.		Scott Baker	Joelle Moss
Rene Catlow	Bill Cox	Dashia Huff	Mary Beth Burandt	Lucinda Borneman	Glen Triner
Richard Clinton	Laura Cusack	Mark Kamberg	Duane Carter	Paul Crane	Greg Varljen
Larry Cole	Lorna Dittmer	Edwin Lamm	Cliff Clark	Tina Crane	Julie Waddoups
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Eric Erpenbeck	Sasa Kosjerina	Jon Perry	Ellen Mattlin	John Dorian	Ted Wooley
Stuart Hildreth	Jim Leary	Christina Robison	Greg Sinton	Mark Ellefson	
Mike Jennings	Dale McKenney	Lana Strickling	Scott Stubblebine	Darrin Faulk	
Stephanie Johansen	Jon McKibben	Lou Upton		Joe Fritts	
Jeanne Kisielnicki	Rick Oldham			Lori Fritz	
Melvin Lakes	Anthony Nagel			Tom Gilmore	
Marty Martin	Linda Petersen			Rob Gregory	
Jim McGrogan	Fred Ruck			Gene Grohs	
Stuart Mortensen	Ray Swenson			James Hamilton	
Dean Nester	Wayne Toebe			Andy Hobbs	
Dave Richards	Daniel Turlington			Ryan Johnson	
Phil Sheely	Dave Watson			Dan Kimball	
Connie Simiele	Joel Williams			Megan Lerchen	
Jennie Stults				Richard Lipinski	
Michael Waters				Charles (Mike) Lowery	
Jeff Westcott				Michael Madison	
Jeff Widney				Terri Mars	
				Cary Martin	
				Grant McCalmant	
				Steve Metzger	
				Tony Miskho	
				Matt Mills	
				Tom Moon	
				Chuck Mulkey	
				Mandy Pascual	
				Kirk Peterson	
				Jean Quigley	

TWO MINUTE TRAINING

SUBJECT: RCRA Manifest Discrepancies and Physical State

- Q: A shipment of waste is manifested as a hazardous waste solid material. Upon receipt at the designated receiving facility the waste is determined to also have hazardous waste liquid material. The volume of waste and the EPA hazardous waste codes remain unchanged. If the only difference in the waste as manifested and received is the physical state, i.e., shipped as a solid, received with some liquid, is this a manifest discrepancy?
- A: Per <u>WAC 173-303-370(5)</u>, [40 CFR 264.72], manifest discrepancies are differences between the quantity or type of dangerous/hazardous waste designated on the manifest, and the quantity or type of dangerous/hazardous waste received at the facility. Significant discrepancies in quantity are weight differences greater than 10% for bulk wastes, and piece count differences for non-bulk wastes. Significant discrepancies in type are obvious differences discovered by inspection or waste analysis, such as a waste solvent substituted for a waste acid, or toxic constituents not reported on the manifest.

Obvious differences discovered by inspection or waste analysis could apply to physical state but it is not clear in the above regulation.

However, per the May 19, 1980, Federal Register (45 FR 33154) on page 33188, middle column, it states:

"Another kind of possible discrepancy between the waste manifest and the actual shipment is a difference in the chemical or physical nature of the waste. The Agency's intention in this respect is to have facilities flag obvious differences in waste type (such as waste solvents received instead of waste acids listed on the manifest), as opposed to the more subtle changes, such as part-per-million variations in the concentrations of heavy metals within a sludge. The Agency wishes to ensure that a facility is properly equipped to handle the wastes it receives and is not subject to surprises in waste type introduced by mistake or on purpose by waste generators or transporters. The . . . requirements for waste sampling and analysis should in most cases, ensure that facilities discover obvious differences in waste type."

Since the phrase "physical nature" is referenced in the manifest discrepancy discussion of the Federal Register, and since receipt of a solid vs. a liquid could be a "surprise" to a receiving facility, differences in the physical state of a dangerous/hazardous waste are considered significant RCRA manifest discrepancies.

SUMMARY:

- A manifest discrepancy is defined as differences between the quantity or type of dangerous/hazardous waste designated on the manifest, and actually received at the facility.
- Significant discrepancies in quantity are:
 - ⇒ For bulk waste, variations greater than 10 percent in weight, and;
 - ⇒ For non-bulk waste, any variation in piece count.
- Significant discrepancies in type are obvious differences which can be discovered by inspection or analysis.
- Differences in physical state are also significant manifest discrepancies.

WAC 173-303-370(5) is attached. If you have any questions, contact me at "Paul_W_Martin@rl.gov" or (509) 376-6620.

FROM: Paul W. Martin DATE: 7/28/16 FILE: c:\...\2MT\2016\072816.rtf PG: 1

TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: RCRA Manifest Discrepancies and Physical State

WAC 173-303-370 Manifest

- (5) Manifest discrepancies.
 - (a) Manifest discrepancies are:
 - (i) Significant differences (as defined in (b) of this subsection) between the quantity or type of dangerous waste designated on the manifest or shipping paper, and the quantity and type of dangerous waste a facility actually receives;
 - (ii) Rejected wastes, which may be a full or partial shipment of dangerous waste that the TSDF cannot accept; or
 - (iii) Container residues, which are residues that exceed the quantity limits for "empty" containers set forth in WAC 173-303-160(2).
 - (b) Significant differences in quantity are: For bulk waste, variations greater than ten percent in weight (for example, tanker trucks, railroad tank cars, etc.); for batch waste, any variations in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
 - (c) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within fifteen days after receiving the waste, the owner or operator must immediately submit to the department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

FROM: Paul W. Martin **DATE:** 7/28/16 **FILE:** c:\...\2MT\2016\072816.rtf **PG:** 2